## INTERNATIONAL SEARCH REPORT

PCT/GB 03/05297

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 E05G1/00 E05G1/06

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 E05G A45C

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## **EPO-Internal**

C. DCCGIM	INTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Χ	US 4 341 166 A (CANTLEY ROSS H) 27 July 1982 (1982-07-27)	1,4-15
Y	column 3, line 26 -column 4, line 48; claims 1-4; figures 1-5	2,3
X	US 3 842 761 A (BLOOM S) 22 October 1974 (1974-10-22)	1,4-11
Y	column 2, line 41 -column 4, line 23; claims 1-3; figures 1-6	2,3
X	GB 2 241 017 A (TUCKER ROBIN) 21 August 1991 (1991-08-21)	1,6,8, 10,23,24
A	page 6, line 17 -page 8, line 4; claims 1,2,10; figures 2,3	2-5,7,9, 11-22, 25-36
	-/	
	·	

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:  'A' document defining the general state of the art which is not considered to be of particular relevance  'E' earlier document but published on or after the international filing date  'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another cliation or other special reason (as specified)  'O' document referring to an oral disclosure, use, exhibition or other means  'P' document published prior to the international filing date but tater than the priority date claimed	<ul> <li>"T" later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone</li> <li>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</li> <li>"&amp;" document member of the same patent family</li> </ul>
Date of the actual completion of the international search	Date of mailing of the international search report
4 March 2004	24/03/2004
Name and malling address of the ISA	Authorized officer
European Patent Office, P.B. 5618 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31–70) 340–2040, Tx. 31 651 epo ni, Fax: (+31–70) 340–3016	Balice, M



PCT/GB 03/05297

		FCI/GB US/	
	ation) DOCUMENTS CONSIDERED TO BE RELEVANT		Relevant to claim No.
Category °	Citation of document, with indication, where appropriate, of the relevant passages		negvant to claim ivo.
X A	US 2002/170473 A1 (SHAWLEE II WALTER ET AL) 21 November 2002 (2002-11-21) paragraph '0052! - paragraph '0072!;		1,4-11 2,3,
	figures 1-5		12-36
P,X	US 2002/186131 A1 (FETTIS BRAD) 12 December 2002 (2002-12-12) paragraph '0073! - paragraph '0074! paragraph '0085! paragraph '0096!; claims 1,6; figures 1,8-12,15		1,4-8, 10,23,24
P,X	US 6 490 893 B1 (BENION JESSIE K) 10 December 2002 (2002-12-10) column 3, line 55 -column 5, line 27; figures 1-4,6	,	1,4-10, 23,24

## INTERNATIONAL SEARCH REPORT

PC.	T/GR	03/	05297
1 0	1 / UD	U - J	00607

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 4341166	Α	27-07-1982	NONE	
US 3842761	Α	22-10-1974	NONE	
GB 2241017	Α	21-08-1991	NONE	
US 2002170473	A1	21-11-2002	US 2002186131 A1	12-12-2002
US 2002186131	A1	12-12-2002	US 2002170473 A1	21-11-2002
US 6490893	B1	10-12-2002	NONE	